

To change the mode of operation from the treatment mode to the physics mode, the vertical drive assembly 254 is adjusted such that the platform 252 can be fixed in a higher position, i.e., in the patient plane. Initially, the platform 252 is raised from a default position to the physics position in the direction of the arrow 306. In one embodiment of the present invention, the platform 252 is raised about 15 centimeters.

The physics cover 303 is then removed by removing the screws 305A. As will be explained in greater detail below, this allows access to the mounting cavity 307. More particularly, as shown in FIG. 10, a "physics pin" 501c may be installed, to secure the platform 252 to the telescoping boom 256. In addition, bolts 502A that secure the vertical positioner to the telescoping arm are removed. In one embodiment of the invention, four such bolts are provided, only three of which are visible in the figure.

As shown in FIG. 11, removal of the bolts 502A allows the vertical drive assembly to move in the direction of the arrow 602. The presence of the physics pin 501A means that the platform 252 is affixed to the telescoping arm. Thus, the vertical drive assembly 254 moves relative to both. Next, the bolts 502A are replaced and the physics pin 501A is removed. This fixes the vertical drive assembly 254 to the telescoping boom 256 in the physics position. Next, as shown in FIG. 12, the platform 252 may be deployed in a standby position by extending the panel along the hinges 301a, 301b.

Finally, the panel is deployed in the physics position, as shown in FIGS. 13 and 14. As shown, the portal imaging system includes the deployed horizontal platform 252, extended on the hinges 304a, b.

The invention described in the above detailed description is not intended to be limited to the specific form set forth herein, but is intended to cover such alternatives, modifications and equivalents as can reasonably be included within the spirit and scope of the appended claims.

#### **WHAT IS CLAIMED IS:**

1. A method, comprising:

2                    commissioning a radiation therapy apparatus using an electronic  
3                    portal imaging device; and  
4                    using said electronic portal imaging device to obtain dosimetric  
5                    measurements during radiation therapy.

1  
2                    2. A method according to Claim 1, wherein said commissioning  
3                    comprises positioning a imaging panel of said electronic portal imaging device  
4                    in a patient plane and obtaining radiation measurements at said patient plane.

1                    3. A method according to Claim 2, wherein said commissioning  
2                    further comprises positioning said imaging panel at predetermined positions  
3                    above and below said patient plane, and obtaining radiation measurements at  
4                    said positions.

1                    4. A method according to Claim 3, wherein said using said  
2                    electronic portal imaging device to obtain dosimetric measurements  
3                    comprises positioning said imaging panel a predetermined distance below  
4                    said patient plane and between a patient and a source of radiation.

1                    5. A radiation therapy device, comprising:  
2                    a linear accelerator for providing radiation to a body; and  
3                    an electronic portal imaging device operably coupled to said  
4                    linear accelerator, said electronic portal imaging device adapted for use in  
5                    commissioning said radiation therapy device and adapted for use in dosimetry  
6                    applications during therapy.

1                    6. A radiation therapy device as recited in claim 5, said  
2                    electronic portal imaging device adapted to be deployed in a patient plane  
3                    during said commissioning.

1                    7. A radiation therapy device as recited in claim 6, said  
2                    electronic portal imaging device adapted to be deployed in one or more

positions above and below a patient plane during said commissioning.

8. A radiation therapy device as recited in claim 7, said electronic portal imaging device adapted to be deployed below a patient plane and between a patient and a radiation source during said therapy.

9. A radiation therapy system, comprising:  
means for delivering radiation to a body;  
a treatment unit adapted to control commissioning of said delivering means and treatment using said delivering means; and  
an electronic portal imaging device for obtaining radiation dose information during said commissioning and said treatment.

10. A system according to Claim 9, said electronic portal imaging device including an imaging panel adapted to be deployed in a patient plane during said commissioning.

11. A system according to Claim 10, said electronic portal imaging device including an imaging panel adapted to be deployed in one or more positions above and below a patient plane during said commissioning.

12. A system according to Claim 11, said electronic portal imaging device including an imaging panel adapted to be deployed below a patient plane and between a patient and a radiation source during said treatment.

13. A radiation therapy method, comprising:  
providing a linear accelerator for providing radiation to a body;  
and  
providing an electronic portal imaging device operably coupled to said linear accelerator, said electronic portal imaging device adapted for use in commissioning said radiation therapy device and adapted for use in

7 dosimetry applications during therapy.

1 14. A radiation therapy method as recited in claim 13, said  
2 electronic portal imaging device adapted to be deployed in a patient plane  
3 during said commissioning.

1 15. A radiation therapy method as recited in claim 14, said  
2 electronic portal imaging device adapted to be deployed in one or more  
3 positions above and below a patient plane during said commissioning.

1 16. A radiation therapy method as recited in claim 15, said  
2 electronic portal imaging device adapted to be deployed below a patient  
3 plane and between a patient and a radiation source during said therapy.

1  
2 17. A radiation therapy method, comprising:  
3 providing a linear accelerator for providing radiation to a body;  
4 and  
5 providing an electronic portal imaging device operably coupled to  
6 said linear accelerator, said electronic portal imaging device adapted for use  
7 in patient exit dosimetry of said radiation therapy device and adapted for use  
8 in dosimetry applications during therapy treatment.